

*Rush*

Work Order ID 62689

Wednesday, October 06, 2010 3:20:04 PM

Page 1

Item ID: D4070-041

Accept

Setup Start

Revision ID:

Stop

Item Name: Clamp

Start Date: 10/6/2010 Start Qty: 40.00

Cust Item ID:

Required Date: 10/15/2010 Req'd Qty: 40.00

Customer:

Reference:

Approvals:

Process Plan: *RP*

Date: *10-10-06*

Tooling:

Date:

Run Start

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

Draw Nbr

Revision Nbr

D4070

A

100

0.00



Waterjet

Memo

0.00

FLOW CNC Waterjet

Cut as per dwg

Prog rev: *A*

dwg rev: *A*

*304 . 063*

*FB 10-10-7*

110

QC2- Inspect parts off machine FAI/FAIB

0.00



QC

Memo

0.00

Quality Control

*FB 10-10-7*

120

QC8- Inspect parts - second check

0.00



QC

Memo

0.00

Quality Control

*8/10/10/08*

*Counted*  
*(x43)*

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

**Work Order ID 62689**

Wednesday, October 06, 2010 3:20:04 PM

Page 2

Item ID: D4070-041

Accept

Setup Start

Revision ID:

Stop

Item Name: Clamp

Start Date: 10/6/2010 Start Qty: 40.00

Cust Item ID:

Required Date: 10/15/2010 Req'd Qty: 40.00

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

130

Form as per dwg

0.00



Brake NC

Memo

0.00

SB 10/10/13

(43)

Brake NC

140

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

SB 10/10/13

count

(x43)

Quality Control

150

0.00



Small Fab

Memo

0.00

SB 10/10/14

(43)

Small Fab

Assemble rubber cushion as per dwg

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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|      |      |                                  | Initial<br>Chief Eng           | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                                |                                 |                |                           |                       |                          |
|      |      |                                  |                                |                                 |                |                           |                       |                          |
|      |      |                                  |                                |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries



| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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|      |      |                                  | Initial<br>Chief Eng           | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                                |                                 |                |                           |                       |                          |
|      |      |                                  |                                |                                 |                |                           |                       |                          |
|      |      |                                  |                                |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

# Picklist Print

Wednesday, October 06, 2010 3:20:09 PM

Page 1

Work Order ID: 62689

Parent Item: D4070-041

Parent Item Name: Clamp



Start Date: 10/6/2010

Required Date: 10/15/2010

Start Qty: 40.00

Required Qty: 40.00

Comments: IPP rev A 10.02.16 new issue EC verified by: DD

| Component Item ID/<br>Item Name | Replacement<br>Item ID | Mfg/<br>Purch | Bin<br>Item | Primary<br>Location | Last<br>Location | Route<br>Seq ID | Unit of<br>Measure | Qty on<br>Hand | Qty per Kit | Total<br>Qty | Qty<br>Issued | Date<br>Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|

|        |  |              |    |  |  |  |   |          |      |          |  |  |  |
|--------|--|--------------|----|--|--|--|---|----------|------|----------|--|--|--|
| D2182B |  | Manufactured | No |  |  |  | f | 191.9952 | 0.15 | 6.315789 |  |  |  |
|--------|--|--------------|----|--|--|--|---|----------|------|----------|--|--|--|



Rubber Cushion

| Location | Loc Qty | Loc Code |
|----------|---------|----------|
|----------|---------|----------|

|        |       |  |
|--------|-------|--|
| ST402A | 27.27 |  |
|--------|-------|--|

|       |       |  |
|-------|-------|--|
| 30872 | 13.67 |  |
|-------|-------|--|

|       |     |  |
|-------|-----|--|
| 39986 | 9.1 |  |
|-------|-----|--|

|       |     |  |
|-------|-----|--|
| 45405 | 4.5 |  |
|-------|-----|--|

|       |           |  |
|-------|-----------|--|
| ST410 | 164.72524 |  |
|-------|-----------|--|

|       |           |  |
|-------|-----------|--|
| 52649 | 164.72524 |  |
|-------|-----------|--|

Cut qty 1 at 1.80" long

M304S16GA



304/316 Sheet .063

|           |    |  |     |    |         |       |     |    |
|-----------|----|--|-----|----|---------|-------|-----|----|
| Purchased | No |  | 100 | sf | 70.6100 | 0.019 | 0.8 | .9 |
|-----------|----|--|-----|----|---------|-------|-----|----|



HB10-10-7

| Location | Loc Qty | Loc Code |
|----------|---------|----------|
|----------|---------|----------|

|     |       |  |
|-----|-------|--|
| MAT | 64.77 |  |
|-----|-------|--|

|        |   |  |
|--------|---|--|
| 111323 | 0 |  |
|--------|---|--|

|        |       |  |
|--------|-------|--|
| 115688 | 64.77 |  |
|--------|-------|--|

|       |      |  |
|-------|------|--|
| MAT20 | 5.84 |  |
|-------|------|--|

|        |      |  |
|--------|------|--|
| 115440 | 5.84 |  |
|--------|------|--|

115688

SB 10/10/14 (43)

63

**Dart Aerospace Ltd**

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries





| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

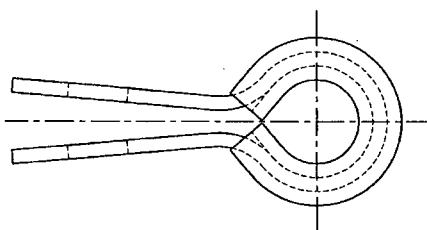
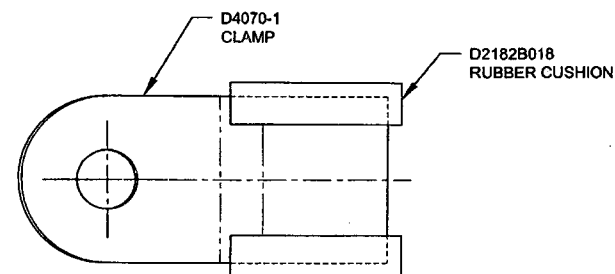
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
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|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

| QTY | PART NUMBER | DESCRIPTION    |
|-----|-------------|----------------|
| X   | D4070-041   | CLAMP          |
| 1   | D4070-1     | CLAMP          |
| 1   | D2182B018   | RUBBER CUSHION |



**D4070-041 CLAMP**

**NOTES:**

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4070-041" USING REMOVABLE TAG
- 7) WEIGHT: 0.05 lbs

UNCO.  
SUBJ.  
V.  
W.  
NO. *62689*  
*D50-10-06*

**RELEASED**  
2010-02-16  
*MP*

|            |             |    |          |
|------------|-------------|----|----------|
| A          | NEW ISSUE   | CP | 10.02.12 |
| REV.       | DESCRIPTION | BY | DATE     |
| DESIGN     |             |    |          |
| DRAWN      |             |    |          |
| CHECKED    |             |    |          |
| MFG. APPR. |             |    |          |
| APPROVED   |             |    |          |
| DE APPR.   |             |    |          |
| DATE       | 10.02.12    |    |          |

|   |              |
|---|--------------|
| <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA  |              |
| DRAWING NO.<br>D4070  | REV. A       |
| TITLE<br>CLAMP  | SCALE<br>NTS |
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| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

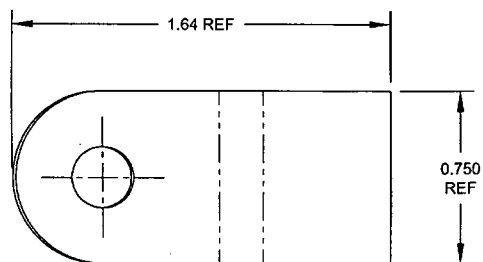
Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

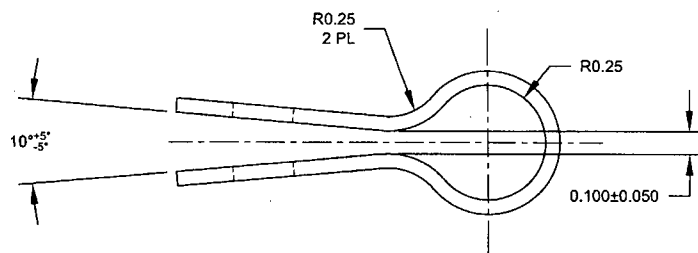
8 7 6 5 4 3 2 1

D



*alo 62689*

C



B

**D4070-1 CLAMP**  
(MAKE FROM D4070-1F)

**RELEASED**  
2010-02-16  
*MD*

**NOTES:**

- 1) MATERIAL: MAKE FROM D4070-1F
- 2) FINISH: POWDER COAT "BLACK SANDEXT" (4.3.5.7) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: NONE
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.04 lbs

|            |           |   |              |
|------------|-----------|---|--------------|
| DESIGN     | <i>92</i> | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA  |              |
| DRAWN      | <i>92</i> |   |              |
| CHECKED    | <i>92</i> | DRAWING NO.   | REV. A       |
| MFG. APPR. | <i>92</i> | D4070   | SHEET 2 OF 3 |
| APPROVED   | <i>92</i> | TITLE   | SCALE        |
| DE APPR.   | <i>92</i> | CLAMP   | NTS          |
| DATE       | 10.02.12  | <small>COPYRIGHT © 2010 BY DART AEROSPACE LTD<br/>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small> |              |

8 7 6 5 4 3 2 1

A

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

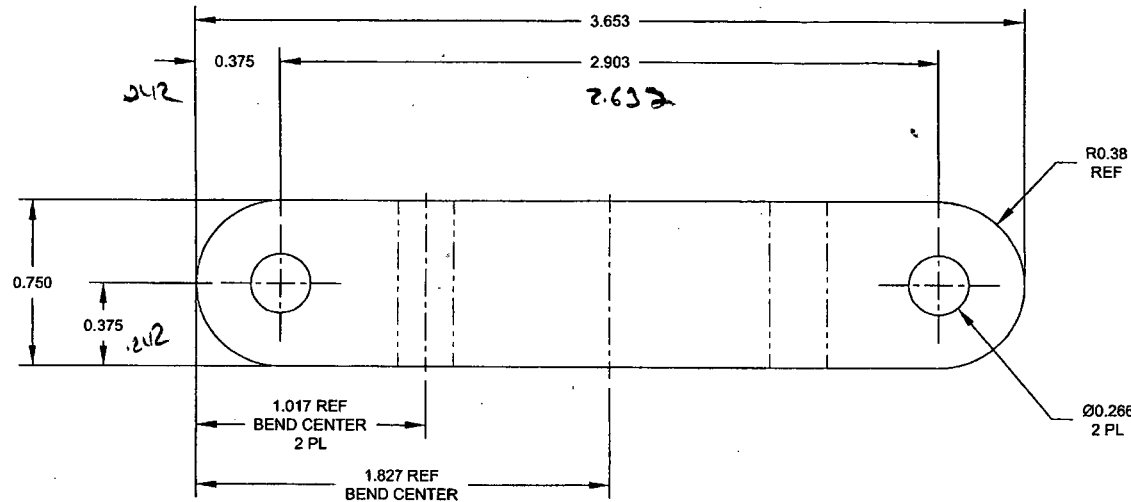
8 7 6 5 4 3 2 1

D

C

B

A



**D4070-1F FLAT PATTERN**

*wlo 62689*

**RELEASE**  
2010-02-16  
*MD*

**NOTES:**

- 1) MATERIAL: AISI 304/316 SHEET 16 GAUGE (0.063 THICK)  
ANNEALED, 2B FINISH  
PER MIL-S-5059 OR AMS 5513 OR ASTM A240 OR ASME SA240  
REF DART SPEC M304S16GA
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.04 lbs

|            |          |  |              |
|------------|----------|--|--------------|
| DESIGN     |          | <b>DART AEROSPACE LTD</b>  |              |
| DRAWN      |          | HAWKESBURY, ONTARIO, CANADA  |              |
| CHECKED    |          | DRAWING NO.  | REV. A       |
| MFG. APPR. |          | D4070  | SHEET 3 OF 3 |
| APPROVED   |          | TITLE  | SCALE        |
| DE APPR.   |          | CLAMP  | NTS          |
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8 7 6 5 4 3 2 1

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
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|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                                |                                 |                |                           |                       |                          |
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|      |      |                                  | Initial<br>Chief Eng           | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                                |                                 |                |                           |                       |                          |
|      |      |                                  |                                |                                 |                |                           |                       |                          |
|      |      |                                  |                                |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries